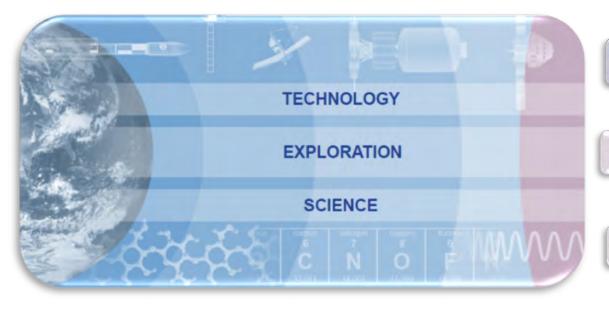
Minority Sustainability Initiative





MUREP Innovation & Tech Transfer Idea Competition (MITTIC)





Engage and collaborate with experts from industry, academia, and NASA centers

Advance broadly applicable technologies to drive exploration

Create and nurture innovation targeted on national needs

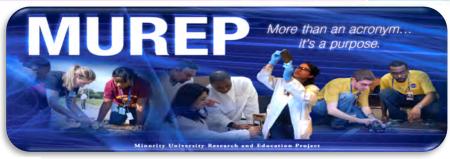
MITTIC Overview



2018 MUREP Innovation and Tech Transfer Idea Competition (i.e., MITTIC; MUREP Tech Transfer Challenge) uniquely engages students from Minority Serving Institutions (MSIs) in NASA's critical SBIR/STTR/Tech Transfer interfaces to design and create advanced concepts that can be used commercially with federal agencies and beyond.

MITTIC Collaborations & Partnerships













MITTIC Onsite Event



Inspire Engage, Educate, Employ.









Initial conceptual designs will be submitted via a formal technical report. A poster session and oral presentation at NASA Johnson Space Center will take place after the initial down select. In addition to the oral presentations, NASA judges review and evaluate technical papers and posters submitted by each team.

Number of Teams Onsite: 10 Selected



MITTIC Tech Transfer IP List



Phase 1: Proposal Submission

	*:	Tech Transfer IP List for MUREP Competition		
#	Center	Technology	Category	Tops #
1	GRC	High/Low Temperature Contactless RF Probes	Communications	58
2	JPL	Metal Patch Antenna	Communications	38
3	JSC	Real-Time Tracking System	Communications	32
4	JSC	Smart Enclosure using RFID for Inventory Tracking	Communications	72
5	JSC	Portable Wireless Signal Booster	Communications	39
6	JSC	Battery Management System	Power Generation & Storage	40
7	ARC	Compliant electrode & composite materials for piezoelectric wind & mechanical energy conversions	Power Generation & Storage	231
8	LARC	Wireless Sensor for Pharmaceutical Packaging and Monitor Applications	Sensors	77
9	MSFC	Accelerometer and Gyroscope Designs Based on CNT Tape	Sensors	55
10	JSC	Passive Smart Container	Sensors	36
11	ARC	Unmanned Aerial Systems (UAS) Traffic Management	Aeronautics	237
12	ARC	Nanosensor Array for Medical Diagnoses	Health, Medicine & Biotechnology	169
13	ARC	Detecting High Stress in Interviews and Text	Health, Medicine & Biotechnology	147
14	ARC	HeartBeat ID	Health, Medicine & Biotechnology	186
15	LARC	Highly Accurate Level Sensor	Sensors	127
16	LARC	Low-Profile Wireless Sensor	Sensors	12
17	ARC	Silent Speech	Sensors	131
18	ARC	Visual Instrument Sensor Organ Replacement (VISOR)	Sensors	137
19	ARC	Method and Device for Biometric Verification and Identification	Sensors	202
20	KSC	Damage Detection System for Flat Surfaces	Sensors	30

MITTIC Winning Team Award Tour



Phase 2: 1 Team Selected for Tour











MITTIC Eligibility



- 1. Primary team members must attend a Minority Serving Institution (MSI).
- 2. Principle Investigator must be from a Minority Serving Institution (MSI).
- 3. Each prospective team member must be a full-time undergraduate or graduate student enrolled in an accredited U.S. institution of higher learning (junior college, community college, college, university) at the time the proposal is submitted.
- 4. Team members must be 16 or older before arrival to Houston.
- 5. All participants MUST be U.S. Citizens.
- 6. All teams must have a supervising faculty member or principle investigator.
- 7. All primary team members and principle investigator MUST attend all onsite week events.
- 8. Each institution should have a letter of intent to support from a participating small business (as defined by the NASA Office of Small Business Programs)
- 9. Primary team members may participate with only one team.
- 10. Teams may enlist the support of students of any classification, faculty members, professional consultants, etc. However, only primary team members may participate in the onsite week at JSC or ARC.

MITTIC Team & Partners



JSC		Ames		LaRC	
Misti Moore	MUREP Manager	Christine Munroe	Business Specialist	Rod Chappell	MSI Partnerships Initiative Lead
Crystal Del Rosso	JSC MUREP Education Coordinator	Anthony Strawa	Chief Technology Office	Sharon Fitzgerald	MSI Partnerships Initiative Lead

NASA HQ

Dan Lockney Technology Transfer Program Executive

GSFC

Torry Johnson Manager of MUREP for American Indian, Alaskan Native STEM Engagement (MAIANSE); Earth Systems, Technology, and Energy Education for MUREP (ESTEEM); and Assistant Deputy Director for Hydrosphere, Biosphere, and Geophysics (HBG)

KSC

Jeppe Compton EPSCOR Program Manager

Questions



MSI

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MITTIC

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